



IN REPLY REFER TO:

## United States Department of the Interior

### FISH AND WILDLIFE SERVICE

1500 Museum Road, Suite 105

Conway, Arkansas 72032



June 26, 2001

Colonel Daniel W. Krueger  
U.S. Army Corps of Engineers  
167 North Main Street, Room B-202  
Memphis, TN 38103-1894

Dear Colonel Krueger:

Recently, a coalition of conservation organizations and local interests introduced an alternative to the Corps of Engineers' Grand Prairie Area Demonstration project. This alternative, entitled, "A Sustainable Alternative to Replace the Grand Prairie Area Demonstration Project (GPADP)," is based on the premise that the aquifer depletion problem on the Grand Prairie should be solved by attacking the problem at its source and working to bring agriculture into alignment with its sustainable water limits. The group maintains that this could be achieved by 1) maximizing water use efficiency (i.e., conservation), 2) maximizing storage of excess surface water, and 3) converting the unsustainable cropland to less water intensive uses. The document provides a comparison of water demand under differing levels of irrigation efficiency, and shows the number of acres that could be effected under these scenarios with on-farm storage capacity.

The proposed alternative raises several valid issues regarding irrigation in Arkansas. The GPADP does not have a formal mechanism for regulating or protecting the aquifer after construction, it will meet only approximately 87.6 percent of the average annual water demand, and it would provide enough water to meet demand during only 57 percent of the project life. In addition, even with construction of the pumping station and water delivery system, approximately 36,000 acres are expected to be converted to dry land farming or other uses, with no public assistance for the farmers forced into this situation. These facts cast doubt on the sustainability of large scale agricultural irrigation projects in Arkansas.

The concepts and rationale behind the proposed Sustainable Alternative use a holistic approach to solving the aquifer depletion problems in eastern Arkansas; a creative approach that is significantly different from the proposed solution, which is to simply get more water from other sources. The rationale behind the Sustainable Alternative is that we should bring our use of the land in synch with the capability of the land to support that given use. The mechanism is to first maximize irrigation efficiency. That we can substantially reduce the amount of water needed to raise crops is proven and in practice. Implementation of side inlet (a.k.a., multiple inlet)

irrigation in Missouri has reduced the amount of water needed to raise rice by as much as 50 percent. Surge irrigation systems have resulted in 20 to 50 percent water savings while also reducing runoff and labor inputs. Furthermore, the Sustainable Alternative would seek assistance for landowners to convert to less water intensive land uses.

We continue to have concerns over the cumulative impacts of irrigation and other proposed projects on the integrity of the White River ecosystem. In an attempt to reduce impacts we fully endorse the rationale and concepts of the Sustainable Alternative, and recommend that they receive full consideration for the Grand Prairie and other proposed irrigation projects in Arkansas.

Sincerely,

A handwritten signature in cursive script that reads "Margaret Harney".

Margaret Harney  
Acting Field Supervisor

cc: Larry Mallard, White River NWR, DeWitt, AR  
Dennis Widner, Cache River NWR, Augusta, AR  
Craig Uyeda, AGFC, Little Rock, AR  
Barbara Keeler, U.S. EPA, Region VI, Dallas, TX  
Tom Foti, ANHC, Little Rock, AR  
Scott Yaich, AGFC, Little Rock, AR  
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